

## **SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9 Client Name: CalTrans

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 136 Const Calendar Day: 682 Date: 22-Jul-2011 Friday
Inspector Name: Wright, Doug Title: Transportation Engineer

Inspection Type: Continuous

**Shift Hours:** 07:00 AM 23:30 PM **Break:** 01:30 **Over Time:** 04:00

Federal ID: Location:

Reviewer: Woods, Mark Approved Date: 25-Jul-11 Status: Approved

Weather

Temperature 7 AM 12 PM 4PM
Precipitation Condition

Working Day 🗸 If no, explain:

Diary:

## **Tower Activities**

Electroslag welding (ESW):

The 18th ESW weld was done today. It was on the skewed T joint that connects shear plate a1N to the West shaft. The following is a list of activities for this operation:

- 2 new barrels of weld wire were brought to the site and connected.
- At 07:15, the consumable guide was installed.
- From 07:15 until 08:40, the insulators, volt pick-ups, and cooling shoes were installed.
- From 09:00 until 09:30, QC & production went through their pre-weld checklists.
- At 10:16, the weld was started.
- It took about 2 minutes, 50 seconds for the weld parameters to stabilize.
- At 14:15, the chiller shut off temporarily, and was re-booted. Water circulation started again within about 2 minutes.
- At 14:22, on the cooling shoes on the inside of the weld joint, one of the fittings between the cooling hose and the shoe had a moderate leak. During a jump of this shoe, they attempted to fix the problem, but the hose broke completely loose of the shoe. So while they were trying to correct this with the shoe away from the weld, they were going to jump with only 2 shoes instead of the normal 3 shoes. When they were jumping 1 of the 2 remaining good shoes, one of the hoses on this shoe also broke free. This sent water streaming down the shoes and the weld creating quite a bit of steam. I called Mark Woods regarding these events. He did not advise asking them to stop, but recommended that they perform the post heat soon after welding is completed. The temperatures should be per the WPS (435 degrees F for 6 hours +/- 1 hour).
- From 14:22 until the end of the welding, they continued to jump the shoes while trying to plug the leaks as best as they could. However, some water continued to stream down the shoes and the weld.
- At 14:46, the weld was ended in the run-off tab.
- After the weld had been completed, I informed ABF Engineer Dan Hester and Superintendent Dan Iracie that we would want the WPS required post heat to be done now on the upper 5 feet of this weld instead of waiting days like the other welds. They said that they would, but it may take a little time to get the equipment set up.
- At 15:45, the heat blankets were in place, and the post heat equipment was turned on.
- At 16:15, one of the heat blankets failed, and had to be turned off, and they had to go find other heat blankets.
- 18:30, the heat blankets were in place, and the post heat equipment was turned on and set at 450 degrees F.
- I stayed until 23:00 monitoring the heat about every 20 to 30 minutes. Each time I checked, the temperature was about 450 degrees F.
- The heat equipment was programmed to turn off automatically at 1am.



Page 1 of 2

Run date 21-Nov-14

04-0120F4

04-SF-80-13.2/13.9

Self-Anchored

Suspension Bridge

Time 5:55 AM

## Daily Diary Report by Bid Item

Job Name: 04-0120F4 Inspector Name: Wright, Doug Diary #: 136 Date: 22-Jul-2011 Friday

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Tower head:

The chimneys and the curved diaphragm were taken down today. Sanny Khow was covering this operation. See his diary for a list of labor and additional details.

One thing of note on the Tower head is the condition of the tapped holes in the 'F' splice plate on the South chimney. The South is the only location where they were able to align the 'F' plate holes and do any bolting. About 20 bolts were snug tightened in this connection. About half of the tapped holes that were bolted had some stripping of the threads. It is possible that these connections may need to be changed to through bolts with nuts to avoid thread stripping during tensioning of these connections.

4-0120F4	Bid Item: 053	T-L01-SPD.053	Tower Lift 0	1 Shear	r Plates	and Diaphrams	
AMERICAN BRIDGE/FLUOR, A JV							
_abor							
Trade	Class	Name	RT Hrs C	OT Hrs I	DT Hrs	Total Remarks	Dispute
Contractor:	AMERICAN BRIDGE/F	FLUOR, A JV					
Ironworker	APP	JEFFERY STONE	8.00	1.00	0.00	9.00	
Ironworker	APP	Alex Blanco	8.00	2.00	1.00	11.00	
Ironworker	APP	DEVAN MURPHY	8.00	1.00	0.00	9.00	
Ironworker	APP	JEREMY DOLMAN	8.00	1.00	1.00	10.00	
Ironworker	APP	JEFFERY SOUZA	8.00	1.00	0.00	9.00	
Ironworker	FOR	RORY HOGAN	8.00	2.00	1.00	11.00	
Ironworker	JNM	RICHARD GARCIA	8.00	2.00	1.00	11.00	